

WHAT IS CLAIMED IS:

1. An authentication station for authenticating a user connected to a network, characterized by comprising:

5        digital certificate storage means for storing a digital certificate issued to the user and validity data representing validity of the digital certificate;

10        registration data storage means for storing as registration data biometrics data based on a biological feature of the user;

      a collation server for collating biometrics data transmitted from the user with the registration data stored in said registration data storage means; and

15        authentication means for determining the validity of the digital certificate of the user, for which authentication is demanded, on the basis of the validity data stored in said digital certificate storage means, and authenticating the user on the basis of a result of the validity determination and a  
20        collation result of said collation server.

2. An authentication station according to claim 1, characterized in that said collating means collates a plurality of kinds of biometrics data.

25        3. An authentication station according to claim 1, characterized in that

      said digital certificate storage means stores

valid dates of the registration data stored in said registration data storage means, and

said authentication means determines the validity of the biometrics data of the user, for which authentication is demanded, on the basis of the valid dates stored in said digital certificate storage means.

4. An authentication station according to claim 3, characterized by further comprising an issuing station for issuing the digital certificate, said issuing station being adapted to store the valid dates of the biometrics data in said digital certificate storage means when issuing the digital certificate.

5. An authentication station according to claim 1, characterized by further comprising amount storage means for storing an authentication compensation amount, said amount storage means being adapted to store the authentication compensation amount determined on the basis of contents of authentication when performing the authentication.

6. An authentication system characterized by comprising:

said authentication station defined in claim 1;  
and

a user terminal connected to said network and having biometrics data acquisition means for causing the user to acquire the biometrics data.

7. An authentication system according to claim 6, characterized in that

said user terminal stores a private key corresponding to a public key registered in the digital certificate,

said user terminal generates a digital signature using the private key and transmits the digital signature to said authentication station, and

said authentication station authenticates the user using the digital signature transmitted from said user terminal.

8. An authentication system according to claim 6, characterized in that

said user terminal stores a private key corresponding to a public key registered in the digital certificate,

said user terminal generates a digital signature in accordance with the private key and the biometrics data and transmits the digital signature to said authentication station, and

said authentication station authenticates the user in accordance with the digital signature transmitted from said user terminal.

9. An authentication system according to claim 7, characterized in that said user terminal encrypts the biometrics data from said biometrics data acquisition

means with the public key of said authentication station and transmits the encrypted biometrics data to said authentication station.

5 10. An authentication system characterized by comprising:

said authentication station defined in claim 1;  
and

10 authentication request means, connected to said network, for requesting said authentication station to authenticate the user.

11. An authentication system characterized by comprising:

said authentication station defined in claim 5;  
and

15 authentication request means, connected to said network, for requesting said authentication station to authenticate the user and notifying said authentication station of authentication contents,

20 wherein said authentication station determines the authentication compensation amount on the basis of the notified authentication contents.

12. An authentication method of causing an authentication station to authenticate a user connected to a network, characterized by comprising:

25 the user registration step of causing the authentication station to issue a digital certificate

to the user, storing the digital certificate and  
validity data representing validity of the digital  
certificate, acquiring biometrics data as a biological  
feature of the user from the user, and storing the  
5 biometrics data as registration data;

the user validity determination step of causing  
the user to transmit the digital certificate to the  
authentication station and causing the authentication  
station to determine the validity of the digital  
10 certificate on the basis of the validity data;

the biometrics data collation step of causing the  
user to acquire biometrics data and transmit the  
biometrics data to the authentication station, and  
causing the authentication station to collate the  
15 biometrics data transmitted from the user with the  
registration data; and

the authentication step of authenticating the  
user on the basis of a result of the validation  
determination of the digital certificate and a  
20 collation result of the biometrics data.

13. An authentication method according to claim  
12, characterized in that

the user registration step comprises acquiring a  
plurality of kinds of biometrics data from the user and  
25 storing the biometrics data as registration data, and

the biometrics data collation step comprises

collating the registration data with each of the plurality of kinds of biometrics data transmitted from the user.

14. An authentication method according to claim 12, characterized in that

the user registration step further comprises storing valid dates of the registration data, and

the biometrics data collation step further comprises causing the authentication station to determine validity of the biometric data from the user on the basis of the valid dates.

15. An authentication method according to claim 12, characterized by further comprising the authentication compensation storage step of storing an authentication compensation amount determined on the basis of the authentication contents when the authentication station authenticates the user.

16. An authentication method according to claim 12, characterized in that the user validity determination step comprises causing the user to generate a digital signature by a private key corresponding to a public key registered in the digital certificate and transmit the digital signature, and causing the authentication station to authenticate the user in accordance with the digital signature transmitted from the user.

17. An authentication method according to claim 12, characterized in that the user validity determination step further comprises causing the user to generate a digital signature by biometric data and a private key corresponding to a public key registered in the digital certificate and transmit the digital signature, and causing the authentication station to authenticate the user in accordance with the digital signature transmitted from the user.

18. An authentication method according to claim 12, characterized in that the biometrics data collation step comprises causing the user to encrypt biometrics data with the public key of the authentication station and transmits the encrypted biometrics data to the authentication station.

19. An authentication method according to claim 12, characterized by further comprising the authentication request step of causing a resource provider who provides a predetermined resource on the network to request the authentication station to authenticate the user.

20. An authentication method according to claim 15, characterized by further comprising the authentication request step of causing a resource provider who provides a predetermined resource on the network to request the authentication station to

authenticate the user and notify the authentication station of authentication contents,

the authentication compensation storage step being adapted to comprise determining the authentication compensation amount on the basis of the notified authentication contents.

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